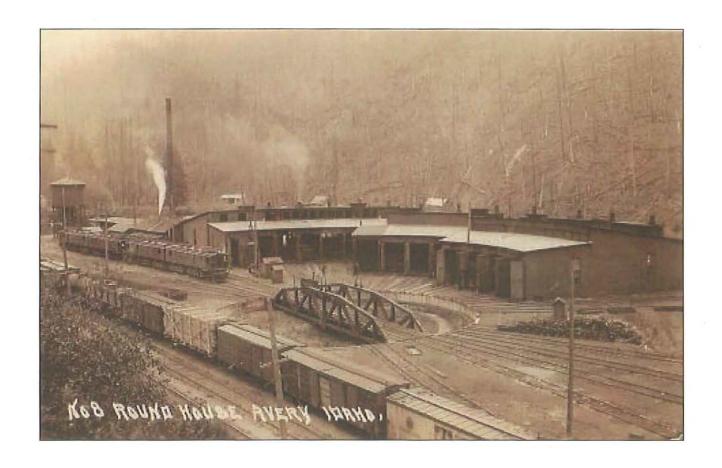
RESULTS OF A CULTURAL RESOURCES SURVEY OF THE AVERY LANDING RAIL YARD PROJECT AREA, SHOSHONE COUNTY, IDAHO



Prepared for

Ecology and Environment, Inc. Seattle, Washington

July 20, 2012

APPLIED ARCHAEOLOGICAL RESEARCH, INC. REPORT NO. 1095



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By

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ABSTRACT

This report describes the results of a cultural resources survey of a 12-acre tract that contains the Avery Division rail yard where contaminated sediments are to be removed. Applied Archaeological Research, Inc. (AAR), conducted this study to assist the Environmental Protection Agency in complying with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800. It follows a Class I literature review conducted by AAR. Based on the information presented in that report, it was AAR's opinion that the remediation site had considerable potential to contain historic-era archaeological deposits related to the Chicago, Milwaukee, St. Paul & Pacific Railroad, also known as the Milwaukee Road. In the earlier report, AAR recommended that an archaeological field study should be conducted at the remediation site before cleanup activities were implemented. The Idaho State Historic Preservation Office reviewed AAR previous report and concurred with that recommendation.

The results of the current project indicate that the Avery Division rail yard is represented archaeologically by several surface features and scatters of historical or likely historical artifacts, some of which are distinctly associated with the railroad, and demolition debris. The features represent the architectural remains of razed structures or demolished railroad facilities such as a turntable, a roundhouse, and sections of track. In 1976, when it was standing, the roundhouse was recorded as a cultural resource that was designated 10SE476. AAR recommends that the site designation be retained but that it is expanded to include the archaeological remains of the roundhouse and other elements of the Avery Division rail yard.

The surface features and scatters of historical artifacts are not likely to meet the registration requirements for listing on the National Register of Historic Places (Criterion D) because their information potential is low. However, the current study was limited to a surface inspection and subsurface archaeological deposits different from those observed on the surface may be present and might have the potential to yield important information. Also, buried parts of the engineering and architectural features may be sources of important information.

The cultural inventory of the Avery Division rail yard is not considered to be complete because the presence or absence of subsurface deposits related to site 10SE476 has not yet been verified. To complete the cultural resources inventory and to provide a more definitive evaluation of the site's eligibility to be listed on the National Register of Historic Places AAR makes two recommendations in consideration of the site's industrial character and the fact that much of it is covered by, and possibly contained within, contaminated sediment. The first is that a cultural resource monitor watch any earthmoving or other ground-disturbing activities in the part of site 10SE476 that contains features related to the turntable and roundhouse (Features 1, 3, 4, and 5). The purpose of the monitoring would be to collect details on the layout, construction, and engineering of those facilities above and beyond those observed at the ground surface. Because the site is contaminated, the cultural resources monitor will need to have had hazardous waste operations and emergency response training.

The second recommendation is that all personnel involved in remediation activities be made aware that the cleanup site is also an archaeological site that has potential to contain buried archaeological deposits. Inadvertent discovery of cultural deposits during subsurface earthmoving is possible and highly probable. Should concentrations of personal- or work-related artifacts be inadvertently uncovered, work in the area of the artifacts should stop until the finds can be documented and assessed. It is AAR's recommendation that structural debris, such as pieces of concrete and brick, metal pipe, and similar materials would not warrant a work stoppage. The planned remediation excavations will directly impact site 10SE476. However, the recommended monitoring and implementation of inadvertent discovery procedures will serve to mitigate those impacts. If the recommendations are followed, AAR recommends a finding of no adverse effect for this undertaking on historic properties.

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INTRODUCTION

This report presents the results of a cultural resources survey conducted by Applied Archaeological Research, Inc. (AAR) of an approximately 12-acre tract of land located along the north bank of the St. Joe River approximately 0.75 mile west of the town of Avery, in Shoshone County, Idaho (Figure 1). The tract is located at a wide spot in the narrow upper St. Joe River valley and is referred to as Avery Landing. It formerly contained the Avery Division rail yard, a facility owned and operated by the Chicago, Milwaukee, St. Paul & Pacific Railroad, also known as the Milwaukee Road. The rail yard included a locomotive turntable and roundhouse, maintenance and repair buildings, and a fuel depot. The facility was constructed between 1908 and 1909 as part of the Pacific Extension of the Milwaukee Road and remained in operation into the late 1970s. In 1976, when it was still standing, the roundhouse at the rail yard, one of the oldest features at the facility, was recorded as an aboveground historical resource (Boreson 1976).

Part of the former rail yard is contaminated with hazardous substances and petroleum hydrocarbons that persist in the subsurface as free product that are discharging into the St. Joe River. Because the contaminants threaten human health and the environment, the contaminated sediments are to be removed. The remediation efforts are to be conducted by or approved by the Environmental Protection Agency (EPA) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Clean Water Act. They would involve the excavation and treatment and/or disposal of the contaminated sediment to an approximate depth of 17 feet (ft) below ground surface, as well as the removal of riprap and subsequent reconstruction of the riverbank, where appropriate. The area of potential effects (APE) defined for the project includes all locations where ground disturbing activities would occur. Figure 2 shows the areas that require cleanup, the boundary of the APE, and existing features and developments within the project area.

AAR's cultural resources survey was performed to assist the EPA in its compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800 (Section 106). It involved background research at the Avery Museum in Avery, Idaho, and archaeological fieldwork, conducted May 22, 2012, by Historical Archaeologist, Jessica Hale, M.A. Fieldwork at the remediation site (the Site) was coordinated with EPA representative, Earl Liverman. The project was under technical supervision of AAR's Principal Investigator, Bill R. Roulette, M.A., RPA.

Project Background

This report follows a Class I literature review conducted by AAR that included a detailed context for the historical land use of the Avery Division rail yard and an assessment of its potential to contain archaeological deposits (Roulette and McCormick 2010). The context statements included in the earlier report are not repeated here. Based on the information presented in that report, it was AAR's opinion that the Site had considerable potential to contain historic-era archaeological deposits related to the Milwaukee Road and that any archaeological deposits located within the area where remediation excavations would be conducted would be damaged or destroyed. AAR recommended that an archaeological field study should be conducted at the Site before the remediation. It was recommended that the study should involve an intensive pedestrian survey of the Site and have as its objectives identifying and recording all cultural resources visible at the ground surface and observed in exposed soil profiles. It was also recommended that the 10SE476 record form should be updated to include any Avery Division rail yard-related archaeological deposit or features that were identified (Roulette and McCormick 2010:13-14).

The Idaho State Historic Preservation Office (SHPO) reviewed AAR previous report and concurred with AAR's recommendations (Pengilly 2011). To those made by AAR, the Idaho SHPO

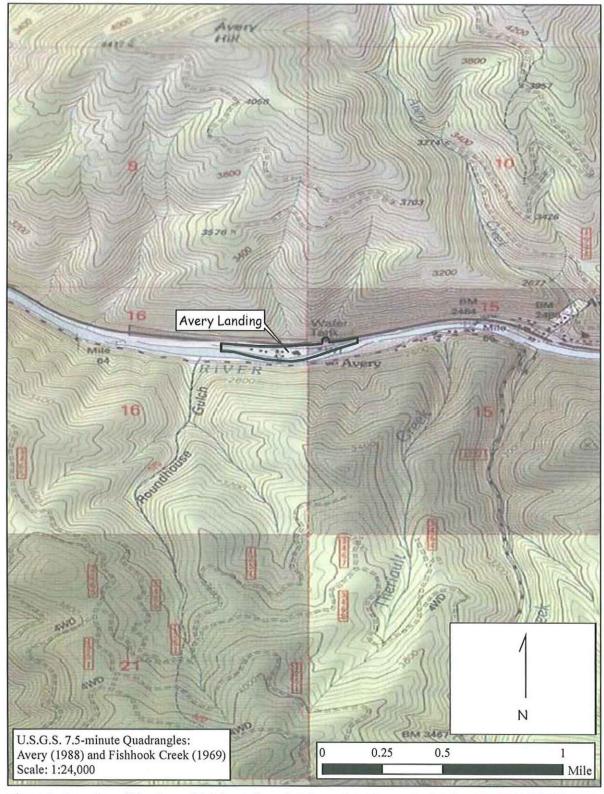


Figure 1. Location of the Avery Division rail yard at Avery Landing as depicted on the USGS 1988 Avery and 1969 Fishhook Creek, Idaho, 7.5-minute topographic quadrangles.

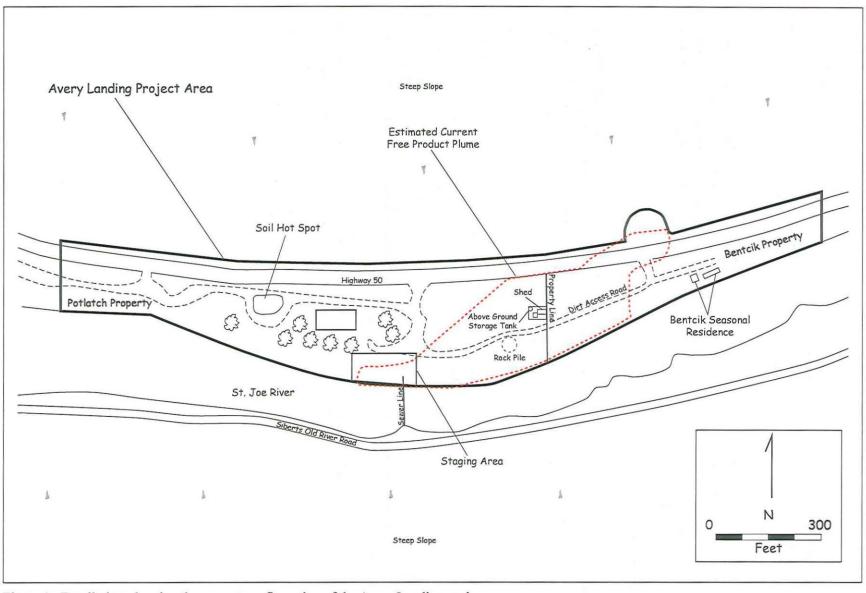


Figure 2. Detail view showing the current configuration of the Avery Landing project area.

added two additional recommendations: that a survey of the former rail yard include efforts to locate archaeological remains associated with a Civilian Conservation Corps (CCC) camp known to have been established at Avery Landing in 1938 and with an encampment of Japanese laborers that worked to construct the original Avery Division rail yard facilities; and that the report describing the results of the archaeological survey should include recommendations for the further treatment or protection of archaeological resources identified within the remediation APE.

This report fulfills the recommendations made in AAR's earlier report (Roulette and McCormick 2010). The current project was limited to the APE for the remediation effort, which did not contain lands where the historical Japanese laborers camp was located. Thus, that recommendation was not fulfilled. The location of the 1938 CCC camp was at least partly within the APE for the current project. Evidence for it was searched for as part of the general survey of the project area.

Project and APE Description

The APE (also referred to in this report as the project area) is located in Shoshone County in the upper valley of the St. Joe River in northern Idaho in sections 15 and 16, Township 45 North, Range 5 East, Boise Meridian (Figure 1). It is in a narrow, steep-walled valley in the St. Joe Mountains, which are part of the larger Bitterroot Mountains, which in turn are included in the Rocky Mountain chain. It is at an elevation of approximately 2,470 ft above mean sea level (amsl).

It encompasses approximately 12 acres that includes the removal operation area, an isolated soil hot spot where sediment also will be removed, a soil stockpile and loading area, a contaminated soil stockpile/dewatering area, a truck driveway and staging area, and a water treatment area (Figure APE map). The APE extends along the St. Joe River for a distance of 2,165 ft and is maximally 360 ft wide on the perpendicular axis. It encompasses most of the Avery Landing landform including a section of State Route 50 and a small area north of the highway (Figure 2). Lands in the APE are owned or are managed by Potlatch Land and Lumber, LLC (Potlatch), the Bentcik family, the Western Federal Lands Highway Division of the Federal Highway Administration (Highway), and the Idaho Department of State Lands, which manages the St. Joe riverbank below the mean high water level.

At present, the Site is mostly vacant (Figure 2). The Highway property contains a section of State Route 50. A house and an outbuilding are located on the Bentcik property. The house serves as the Bentcik seasonal residence and would be moved to the easternmost end of the property as part of the project (Figure 3). The Potlatch property contains a concrete pad, one shed, several storage tanks, a large rock pile, and a staging area where large equipment is stored (Figures 4 and 5). The project area is covered with short sparse grass and has a dirt access road running through the center of it.



Figure 3. Overview of the Bentcik property within the project area. View is to the southeast.



Figure 4. Overview of the Potlatch property within the project area. Photo is looking west from atop a large rock pile located on Potlach property with the staging area in the background.



Figure 5. Overview of the main excavation zone in its current condition. A modern shed and storage container sit on top of a historic concrete pad (Feature 2, see below). View is to the northeast.

FIELD METHODS

The goal of the fieldwork was to identify and record all cultural resources visible at the ground surface and exposed in soil profiles. Fieldwork was conducted on May 22, 2012. All parts of the 12-acre project area were examined using pedestrian transects spaced no more than 10 ft apart (Figure 6). In areas where archaeological or architectural features or deposits were observed, or were suspected to be present, transects spaced 3 ft apart were walked in a back and forth manner until the areas were thoroughly examined. Cultural deposits and features were cleared or partly cleared of vegetation, as appropriate, using a hand trowel, and photographed. To the extent possible, artifacts encountered in the field were identified as to type, material, function, and chronological association. Maker's marks on bricks and on glass bottles were recorded and photographed and were used to date the objects on which they appeared using standard archaeological references (Gurke 1987; Toulouse 1971). They were not collected.

Identified cultural features were measured and photographed. A 1915 plan map of the Avery Division rail yard was carried into the field. Using landscape features that appear on the map and also on the modern landscape, such as the St. Joe River, State Route 50 (which was constructed in the same location as the main Milwaukee Road rail lines), and the dividing line between sections 15 and 16, Township 45 North, Range 5 East, Boise Meridian (which coincides with a boundary between Potlach and Bentcik lands and was marked in the field), it was possible to correlate archaeological features observed at the ground surface with specific buildings and railroad facilities that appear on the 1915 map.

Universal Transverse Mercator coordinates were collected for features and artifacts using a handheld Trimble GeoExplorer III global positioning system (GPS) device. GPS data were corrected and exported to a graphics program for final editing and formatting.

Digital cameras were used to photodocument the fieldwork. Digital images, field notes, maps, and other materials associated with the project area are temporarily curated at the AAR office in Portland, Oregon.

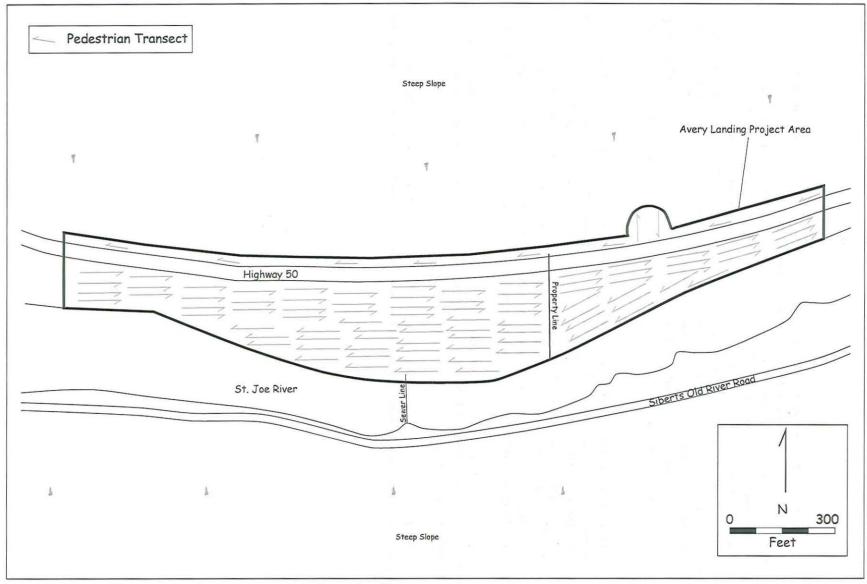


Figure 6. View of the Avery Landing Project area showing pedestrian transects.

RESULTS

Vegetation in the project area mainly consisted of short grasses. It generally was sparse such that ground surface visibility was between 75 to 95 percent except in a few discrete locations where vegetation was thicker.

As a result of the survey, five architectural features and five scatters of historical or likely historical artifacts and/or demolition debris were identified at the ground surface (Figure 7). They were observed in an area that measures 1,866 ft along the St. Joe River and maximally 360 ft wide on the perpendicular axis. Correlating the features with a 1915 plan map of the Avery Division rail yard (Figure 8), they represent part of the foundation of the turntable, the slab foundation or floor of the boiler room, and three sections of tracks and/or remnants of foundation that represent bay stalls that were within the roundhouse. The scatters of historical or likely historical artifacts are typically small and combined they contain only about 100 items. In aggregate, most of the artifacts in them are architectural (80 percent); some are recognizably railroad-related (10 percent), and a few are domestic in nature (10 percent). Readily identified datable objects included four complete glass containers and one complete brick (Table 1). The features and deposits are interpreted as archaeological remnants of the Avery Division rail yard, When it was standing, the roundhouse at the rail yard was recorded as an aboveground cultural that was designated 10SE476. Rather than apply for a new site designation for the archaeological remains of the Avery Division rail yard, it is suggested that the current site designation is retained but is expanded to include the features representing the roundhouse and archaeological deposits representing the other elements of the rail yard. An updated 10SE476 site record form is included in this report as Appendix A.

Features

Feature 1, Bay Stall, southeastern section of the roundhouse

What likely is a concrete floor or foundation was identified in the south-central part of the project area near the river bank and a short distance west of the section 15/16 boundary. According to the 1915 map, it is in the vicinity of the southeastern part of the roundhouse and very near where the map shows a storage bay within the roundhouse to have been located (Figures 8 and 9). It was likely part of one of the 12 bay stalls where locomotives were stored or maintained. The feature is composed of two disconnected pieces of concrete. The larger of the two is rectangular in outline and minimally 1 foot tall. It frames an interior space filled with gravel and covered with grass. As observed it is 24 ft long and 8.5 ft across from outside edge to outside edge. The other part of the feature is a concrete footer or part of a foundation. It is 2 ft west of the first part. As observed it is 24 ft long and 3.25 ft wide. Both parts of Feature 1 extend northward and are covered by a large pile of rock. It is likely that Feature 5, described below, represents a continuation of Feature 1 on the north side of the rock pile. No artifacts were associated with Feature 1.

Feature 2, Boiler House foundation and pad

A concrete slab was observed at the eastern end of the Potlatch property just west of the section 15/16 line in an area that would have been in the center of the rail yard. It is 50 ft long east to west and 32 ft wide north to south (Figure 5). Its location and dimensions closely match those of the "Boiler House" depicted on the 1915 map (Figure 8). One complete brick was found next to the foundation/pad. The brick is machine made and tan in color. It is marked "309/SECURITY" (Figure 10). The mark identifies the brick as having been manufactured by the American Arch. Co. between 1910 and 1911 (Gurke 1987:294).

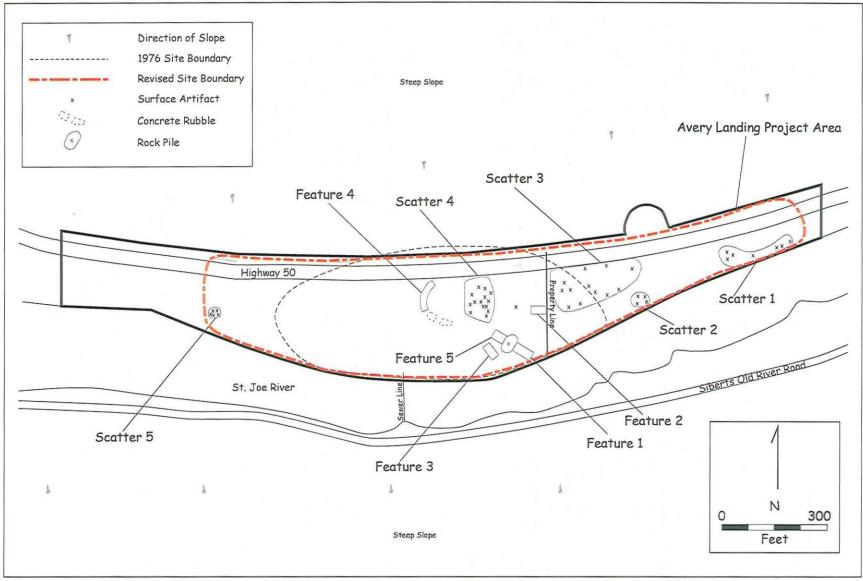


Figure 7. View of the Avery Landing Project area showing the location of historical features and debris scatters.

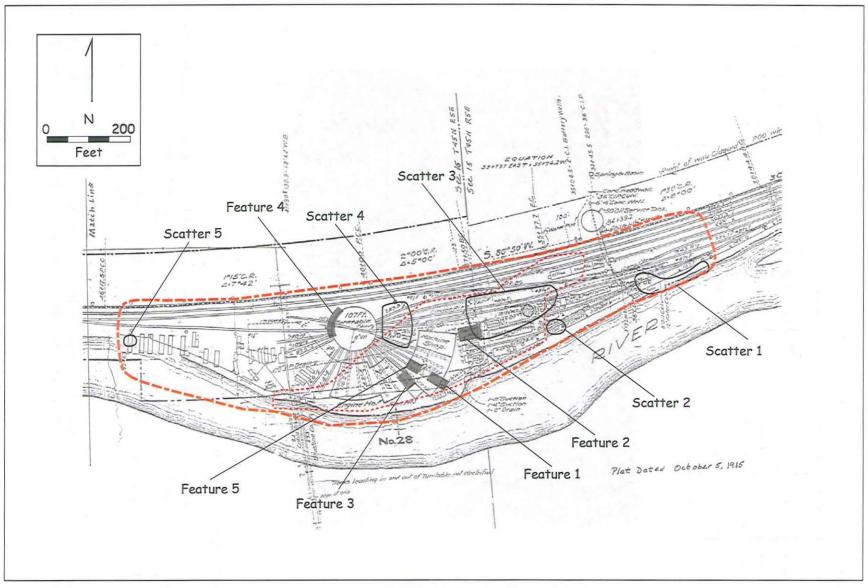


Figure 8. Schematic map showing the layout of the Avery Landing Rail Yard in October 1915 and the location of the features and historic scatters, and the revised site boundary (orange dashed line).

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Table 1.	Datable	armacis	rrom	Site	105E1076	

Location	Artifact	Trademark	Company	Date Range	Reference
Scatter 5	Flask	"Patent (Diamond IO Mark)7 D 161825"	Owens Illinois Glass Co.	1937	Toulouse 1971:390; Lockhart to Hale PC 2010
Scatter 5	Jar	"144/NW/8"	Northwestern Glass Co.	Since 1931	Toulouse 1971:390
Scatter 5	Beer Bottle	"563 /NW /6"	Northwestern Glass Co.	Since 1931	Toulouse 1971:390
Scatter 5	Beer Bottle	"[Base:]20/(Diamond IO Mark) 47/2	Owens Illinois Glass Co.	1947	Toulouse 1971:403; Lockhard to Hale PC 2010
Near Feature 2	Brick	"309/SECURITY"	American Arch. Co.	1910-1911	Gurke 1987:294



Figure 9. Photograph of Feature 1 looking southeast from atop the large rock pile located on Potlach property.

Feature 3, Lead railroad tracks to a storage bay, storage bay floor

Metal railroad tracks laid in concrete were observed a short distance to the west of Feature 1 in the southern part of the project area. The location of the tracks corresponds well to where a storage bay and lead tracks are shown on the 1915 map (Figure 8). On the map the tracks are denoted to have been 129 ft, 1 inch long and connected the storage bay to the turntable. The observed section was approximately 15 ft long and 13 ft wide and would have been situated on the east side of the roundhouse.

As shown in Figure 11 the inside of the roundhouse where trains were kept in storage bays included tracks and a concrete floor very similar to the arrangement of Feature 3. Specifically, the feature consists of one 2-inch thick metal rail next to an approximate 12-foot wide concrete slab (Figure 12).



Figure 10. Close-up of brick recovered near Feature 2.



Figure 11. Photograph from the 1970s showing the interior of one of the storage bays in the roundhouse. Used courtesy of The Avery Museum.



Figure 12. View of Feature 3 that represents one set of lead tracks that were used to move locomotives and train cars between the turntable and the storage bays in the roundhouse. View is northwest.

Feature 4, Turntable foundation

Feature 4 is located just south of Highway 50 in an area that would have been toward the center of the Avery Division rail yard (Figure 8). The feature is part of a circular concrete footer or foundation that represents an interior element of the railroad turntable that was used to move and position locomotives (and rail cars) between the main rail tracks to lead tracks that led into the roundhouse storage bays. Feature 3, described above, is an example of a lead track. The turntable was a large, round, concrete feature that was 107 ft in diameter and consisted of two tiers (Figure 8). Feature 4 is part of the interior, lower tier. Its function is unknown but it may have served as the surface upon which the turntable rotated (Figure 13). Feature 4 is approximately 20 ft long and 16 inches wide (Figure 14). Attempts to follow the arcing footer/foundation were unsuccessful and it may be buried beneath the ground surface. Following the arc of the exposed part led to several large pieces of concrete rubble that likely represent a demolished section of the turntable (Figure 15).

Feature 5, Lead railroad tracks between storage bay and turntable

Feature 5 consists of a section of lead tracks that would have been between the turntable and the roundhouse or partly within the roundhouse. The tracks are marked by two parallel indentations on the ground surface, where rail track has been removed, surrounded by concrete. Another set of lead tracks, Feature 3, oriented parallel to Feature 5, are located just to the west (Figure 16). Feature 5 is 40 ft long and 5 ft wide. It extends southeastward to a large rock pile. Feature 1 is in line with it and the two features appear to represent most of the length of a single set of lead tracks.

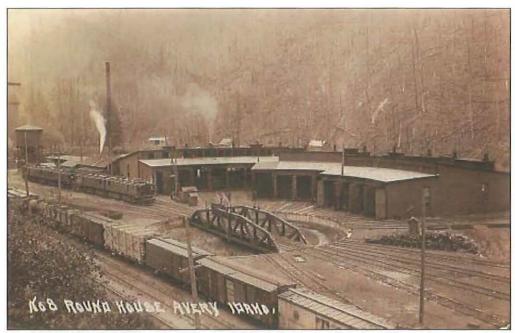


Figure 13. The roundhouse and the turntable at the Avery Landing Site as it appeared circa 1920. Ted Schnepf Collection.



Figure 14. Photograph of the eastern portion of the turntable. Arrow is pointing at the interior concrete foundation of the turntable. Used courtesy of The Avery Museum.



Figure 15. Feature 4, concrete foundation of the interior section of the turntable. View is to the south.



Figure 16. Feature 5, concrete floor and lead track lines. Another set of lead track, Feature 3, can be seen to frame left. View is northwest.

Artifact Scatters

Five artifact scatters were found. Four of these are essentially scatters of demolition debris most likely from the razing of the buildings at the Avery Division rail yard, which occurred between 1979 and the mid-1980s (Roulette and McCormick 2010:11). One is a small bottle scatter that probably dates to the late 1940s.

Scatter 1

Located in the easternmost part of the project area within the Bentcik property at the top edge of the river bank, this scatter of modern and historical debris included a corroded wire, two wooden railroad ties, one concrete fragment, milled wood, and three pieces of modern bottle glass (Figure 17). Items identifiable as more than 50 years were mixed together with objects of undeterminable age and items that were modern. The historical items were observed scattered in an area measuring approximately 100 ft east to west and 20 ft wide north to south. Materials included items of architectural character and more specifically were attributed to the Avery Division rail yard deconstruction.

Scatter 2

Scatter 2 consists of one crushed metal can, two brick fragments, and pieces of concrete. The metal can was rectangular and probably contained oil or gasoline. The materials were located within the Bentcik property near the river bank and covered a small area of 20 ft by 20 ft.

Scatter 3

The historic-era scatter is situated on level terrain, just south of Highway 50 within the Bentcik property. It consists of a sparse scatter of domestic and architectural debris over an area of 150 ft by 100 ft. Artifacts noted include one piece of aqua-colored bottle glass, one undecorated fragment from a ceramic bowl, three railroad spikes and a metal railroad plate that was marked "55 LB AS_E & RR/90 LB ARA A" (Figure 18), several pieces of terra cotta sewer pipe, and two slabs of concrete.

Scatter 4

Scatter 4 is located on the Potlatch property immediately west of Feature 2 and covers an area approximately 140 ft long and by 40 ft wide. At the ground surface it includes two pieces of aqua bottle glass, about 12 whole bricks (both red and tan), several bricks attached together with mortar, and large concrete pieces (Figure 19). No maker's marks were noted on the glass or brick items. The debris is mostly architectural and likely related to demolition of the roundhouse and associated buildings of the rail yard.

Scatter 5

This scatter is located at the western end of the project area, next to the bank, and includes four historical bottles (Figure 20) and one train railcar wheel (Figure 21). The train wheel is 17 inches in diameter, made of metal, and is located 10 ft north of the bottles. Two of the glass containers are amber beer bottles, one is a colorless milk bottle, and the other, also colorless, is a flask. The colorless containers show no hint of amethyst coloring, which is indicative of the use of manganese dioxide as a decoloring agent in the glass, which if present would date the bottles to ca. 1880-1925 (Newman 1970). Each bottle is embossed on its base with a makers' mark. Two of them feature the oval-diamond-I trademark for the Owens- Illinois Glass Company (Toulouse 1971:403) and the other two are embossed with a connected "NW" for the Northwestern Glass Company.



Figure 17. Photo of Scatter 1 located in the easternmost part of the project area.



Figure 18. Railroad-related artifact found within Scatter 3.



Figure 19. Structural debris included in Scatter 4.



Figure 20. Bottles included in Scatter 5. Trowel points north.



Figure 21. Train wheel included in Scatter 5.

The Northwestern Glass Company has used the connected "NW" trademark since 1931 (Toulouse 1971:390), while the oval-diamond-I trademark for the Owens-Illinois Glass Company was in use from 1929 to 1954 (Toulouse 1971:403). The number "7" appears to the right of the trademark on the Owens-Illinois flask, in the place where, according to Toulouse (1971) and Lockhart (2010), the year of manufacture should be located. It is likely that this single digit number represents 1937 because after 1940, Owens-Illinois began to use double digit year codes (Bill Lockhart, personal communication to Jessica Hale, May 1, 2010). The other Owens-Illinois container is a beer bottle and is embossed on the base with the number "47" to the right, which undoubtedly represents 1947.

Determination of Eligibility

The features identified at the ground surface appear mostly associated with the turntable and roundhouse at the Avery Division rail yard. The roundhouse was the most noteworthy component of the rail yard and was recorded as a historical resource in 1976, designated site 10SE476 (Boreson 1976). At that time the roundhouse was extant and it appears that the recorder's intent was for it to be given status as an aboveground cultural resource. Features 1, 3, 4, and 5 represent archaeological traces of the roundhouse and associated turntable and the site boundary of 10SE476 has been expanded to include them. Feature 2 and the five artifact/debris scatters also appear associated with the Avery Division rail yard and the site designation is applied to them as well. Site 10SE476 as it is now defined encompasses most of the Avery Landing landform and the Avery Division rail yard that was located on it (Figure 8). An updated record form for the site is included in this report as Appendix A.

AAR's survey was not designed or intended to formally evaluate the significance of the site 10SE476, although a preliminary assessment can be made. As was noted in Roulette and McCormick (2010:13-14) the Avery Division rail yard was arguably the most important element of the Milwaukee Road rail system in the upper St. Joe River valley. It was essential to the operations of the railroad and to the growth of the town of Avery. The rail system of which it was part has been determined to be

important in the history of American railroading for the significant contributions it made in railroad technology. At one time it had over 600 miles of electrified track making it the world's longest electrified railroad. Parts of the railroad have been listed or have been determined to be eligible for listing on the National Register of Historic Places (NRHP). Its passenger depot in Avery is a NRHP-listed property as is a 56-mile section of the line running between the mouth of Loop Creek in Shoshone County to St. Regis in Montana, and the section of the railroad system in Washington State.

The Avery Division rail yard persists as an archaeological site. The value of the archaeological site as a contributory element to the NRHP-listed parts of the Milwaukee Road is appropriately considered under Criterion D of 36 CFR 800. It is AAR's opinion that the features and artifact/debris scatters as they were observed at the ground surface do not represent sources of important information related to railroad technology. It is therefore AAR's preliminary assessment that archaeological site 10SE476 does not appear to meet the NRHP eligibility requirements under Criterion D.

Because of the contaminants that persist in the subsurface, AAR's survey did not include subsurface sampling. The presence of subsurface archaeological deposits related to the rail yard cannot be precluded. In consideration of the size of the operation and the number of buildings that formerly were present at the Avery Division rail yard, and of the evidence that features related to the turntable and roundhouse remain visible at the modern ground surface it is very likely that railroad-related archaeological deposits are present below the ground surface. It is expected that these would include architectural features dating to the early twentieth century that mark locations of former shops and other structures, and the cinder pit and other below-ground facilities that are depicted on the 1915 map of the yard. It is also very probable that artifacts are associated with these features that at a minimum would include structural debris such as pieces of pipe, concrete, wood, window glass, and nails. The information potential of these types of features is quite low other than for assisting in establishing the physical layout of the facility. However, that information is well known as it is depicted on the 1915 rail yard plat map.

The subsurface part of archaeological site 10SE476 may also contain deposits of personal- or work-related artifacts. During the Class I literature review conducted by AAR no information was found that referred to how the rail yard material wastes were handled. With the specialized work performed there it can be assumed that there was a premium placed on keeping work areas clear of general refuse. With a work crew that at times exceeded 200 persons, operations in the yard can be expected to have generated considerable waste related to railroad work, possibly administrating that work, and also to the daily activities of the workers (Roulette and McCormick 2010). It can be assumed that some on-site disposal of waste occurred. Such deposits, if present, could provide insight into the habits and behaviors of railroad workers and the work life inside the Avery Division rail yard.

SUMMARY AND RECOMMENDATIONS

Summary

This report has described the results of a cultural resources survey of the Avery Division rail yard, where contaminated sediments are to be removed. AAR conducted this study to assist the EPA in complying with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800. It follows a Class I literature review conducted by AAR that included a detailed context for the historical land use of the Avery Division rail yard and an assessment of its potential to contain archaeological deposits (Roulette and McCormick 2010).

The results of the cultural resources survey indicate that the Avery Division rail yard is represented archaeologically by several surface features and scatters of historical or likely historical artifacts, some of which are distinctly associated with the railroad, and demolition debris. The features represent the architectural remains of razed structures or demolished railroad facilities such as a turntable, roundhouse, and boiler house. The scatters of artifacts and demolition debris are dispersed across the Avery Landing landform and contain low-density cultural deposits. As observed, the site is not likely to meet the registration requirements for listing on the NRHP, because its information potential is low. However, as described above, subsurface archaeological deposits could be present. If such deposits are present, they might have the potential to yield important information.

Other historical uses of the Avery Landing landform are not represented archaeologically, at least by surface features and artifact scatters. No archaeological evidence was observed that could be clearly associated with the CCC camp known to have been established at Avery Landing in 1938 or with use of the landform by Potlatch during the historic period, 1944 to 1962.

Recommendations

The cultural inventory of the Avery Division rail yard is not considered to be complete because the presence or absence of subsurface deposits related to site 10SE476 has not yet been verified. To complete the cultural resources inventory and to provide a more definitive evaluation of the site's eligibility to be listed on the NRHP AAR makes two recommendations in consideration of the site's industrial character and the fact that much of it is covered by, and possibly contained within, contaminated sediment. The first is that a cultural resource monitor watch any earthmoving or other ground-disturbing activities in the part of site 10SE476 that contains Features 1, 3, 4, and 5, that are related to the turntable and roundhouse (Figure 22). During monitoring an archaeologist would closely observe the excavations in the area where the turntable and roundhouse were located to ensure that important details on the layout, construction, and engineering of those facilities are not destroyed by the remediation efforts. Excavations in the area shown shaded in Figure 22 should involve a piece of equipment mounted with a toothless bucket removing shallow lifts of no more than 6-inch thickness. If at any point during the excavations the monitor encounters features (or other type of archaeological deposits) and believes that further examination of them is warranted, all ground disturbances must halt within 100 ft of the designated area. Because of details of layout, construction, and engineering that are of interest may not be adequately exposed using heavy equipment, it may be necessary for the cultural resources monitor to manually excavate loose soil away from exposed features using a flat-nosed shovel. Note that because the site is contaminated, the cultural resources monitor will need to have had hazardous waste operations and emergency response training.

It is expected that the subsurface part of the features present in and around where the turntable and roundhouse were located are shallowly buried so that after they been adequately documented, excavations using a toothed-bucket and thicker lifts may resume without a monitor in place.

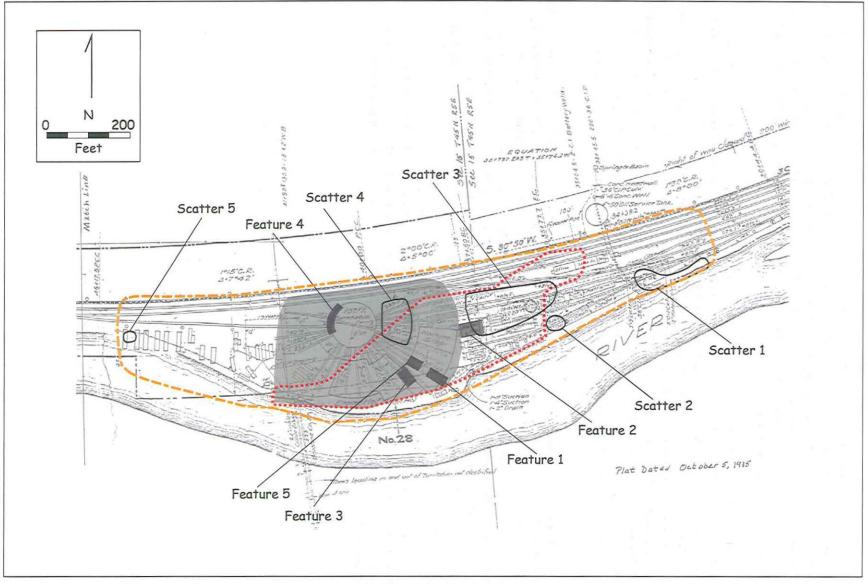


Figure 22. Showing the location of recommended monitoring (shaded gray), site boudaries (orange dashed line), features and scatters recorded and the estimated Current Free Product Plume (red dashed line) overlaid on the 1915 Avery Landing Train Station Schematic map.

The second recommendation is that all personnel involved in remediation activities be made aware that the cleanup site is also an archaeological site that has potential to contain buried archaeological deposits and should be informed that any construction-related damage to potentially significant archaeological deposits is unlawful. Procedures should be in place and well understood by all personnel involved in the remediation effort on how to treat potentially significant archaeological deposits should they be inadvertently discovered.

It is likely and archaeological deposits will be uncovered during the clean-up activities. Not all, and possibly none, of the archaeological deposits that may be uncovered would be considered potentially significant. In general, significant cultural deposits would include personal- or work-related artifacts, rather than the structural remains of the rail yard itself. Significant deposits would include concentration of refuse generated by the workers at the rail yard. Such refuse could provide archaeological and historical insight into the working conditions and lifeways of the workers and also information relevant to the understanding of the history of the community of Avery and the history of the upper St. Joe river valley. If these types of archaeological deposits are inadvertently uncovered during the remediation excavations, all work in the area of the artifacts should stop until the finds can be documented and assessed.

It is likely that much if what may be uncovered during the excavations will have low information content and interpretive value. Archaeological deposits of this variety would include the general debris associated with the razing of the facility such as pieces of pipe, concrete, wood, window glass, and nails, as well as displaced remnants of architectural features such as pieces of concrete foundation or brick walls. They could also include architectural features such as concrete slabs associated with structures that are depicted on the 1915 map of the yard. It is AAR's recommendation that these varieties of archaeological materials may be removed as part of the normal remediation efforts and would not warrant further inspection or documentation by archaeologists.

The planned remediation excavations will directly impact site 10SE476. However, the recommended monitoring and implementation of inadvertent discovery procedures will serve to mitigate those impacts. If the recommendations are followed, AAR recommends a finding of <u>no adverse effect</u> for this undertaking on historic properties.

REFERENCES CITED

Boreson, Keo

1976 Idaho Archaeological Survey-Potential Sites Record for 10SE476. On file at the Idaho State Historical Society, Boise, Idaho.

Gurcke, Karl

1987 Bricks and Brickmaking: A Handbook for Historical Archaeology. University of Idaho Press, Moscow, Idaho.

Lockhart, Bill

2010 "The Dating Game: In Pursuit of the Elusive Diamond G." Bottles and Extras 21(3):56-60.

Newman, T. S.

1970 A Dating Key for Post-Eighteenth Century Bottles. Historical Archaeology 4:70-75.

Pengilly, Susan

2011 Letter to Earl Liverman, Environmental Protection Agency Region X from Susan Pengilly, State of Idaho Deputy State Historic Preservation Officer and Compliance Coordinator dated April 21, 2011. Copy on file, Applied Archaeological Research, Inc., Portland, Oregon.

Roulette, Bill R. and Erica D. McCormick

2010 Results of a Class I Inventory of the Avery Landing Project Area, Shoshone County, Idaho. Report No. 991. Applied Archaeological Research, Inc. Portland Oregon.

Toulouse, Julian

1971 Bottle Makers and Their Marks. Thomas Nelson, Inc. New York.

APPENDIX A

Documentation Form:

10SE476 (Update)

ARCHAEOLOGICAL SURVEY OF IDAHO SITE INVENTORY FORM

Part A – Administrative Data

	1. State No 10SE476 (Update)
	2. Agency No.
	3. Temporary No.
4. Site name(s) Avery Division Yard Site	5. County Shoshone
6. Class:	V
☐ Prehistoric ☐ Historic ☐ Traditional Cultural Property	Undetermined
7. Land owner: Potlatch Land and Lumber, LLC/Bentcik Family 8. Federal	admin. unit
9. Project Avery Landing 10. Re	port No <u>. 1095</u>
11. Recorder(s) Jessica A. Hale, M.A.	
12. Organization Applied Archaeological Research, Inc. 13. Date	May 22, 2012
14. Attachments and associated records:	
□ Topographic map (required) □ Stratigraphic profit	
Site map (required) ☐ Rock art attachme Photos with labels/log (required) ☐ Historical records	nt
	<u> </u>
☐ Feature drawings ☐ Other	limited and the second
15. Elevation (site datum) 2470 (ft)	
16. Site dimensions: <u>569</u> m X <u>68</u> m Area <u>39088</u>	_m²
17. UTM at site datum: Zone11 589151 m Easting5233571 m Northing us	ing NAD 1983.
18. UTM source: ☐ Corrected GPS/rectified survey (<5m error) ☐ Uncorrected GPS ☐ Map	template Other explained under comments
19. Township 45N, Range 5E, Section (s) 15, 16;1/4 of1/4 of	f1/4
20. USGS 7.5' map reference See Figure 1 Additional maps listed on an attachment.	
21. Access From the town of Avery, Idaho, drive west on St. Joe River Road (I walk or drive south onto the first access road. The site is on the south side of S approximately 569 meters along the north bank of the St. Joe River.	
•	
22. Site description The historical site is approximately 569 meters (m) east to The site includes five historic features and five artifact scatters that are all asso which was the former location of a railroad roundhouse, turntable, and mainter	ciated to the Avery Division Rail Yard

by the Chicago, Milwaukee, St. Paul & Pacific Railroad also known as the Milwaukee Road. The site was thoroughly

surveyed

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*Evaluation sub		by SH	iPO,													
26. NRHP crit	eria used: A: Event			B: Person			C:	Design	and con	stru	action	X	CD:	Informatio	n noter	tial
27. Comments	on significa	ance						-				***		mormano	ii potet	
common rail y not sources of sampling was Such deposits life inside the	important conducted , if present	info Th	ormatione pres	on. Beca sence of a ovide insi	use of tarchaeo	the cologic	ontar	ninant posits	s that relate	pe ed	ersist in to to the ra	he sul	bsur d ca	face, no	subs precl	surface uded.
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34. Excavation 35. Additional																

Part B – Environmental Data

	e to permanent water	1_m		
37. Water				
	Cr. I	River/stream		Other
38. On-site	vegetation (estimate po	ercentage of total vegetation	for each class and	identify species):
	Trees: 5 % Species:	_n/a		_
,	Shrubs: 0 % Species:			
	Forbs: 0 % Specie	s:		
	Grasses: 80 % Species:			
	mosses: 0 % Species: b		1 1 00 7 7	
				River is sparsely lined with deciduous
		ite there is a grove of a mix of	coniter and hardwo	oods.
	surface area:	6 □ 26-50%	D 61 750/	E) 7/ 1000/
□ 0%			□ 51-75%	□ 76-100%
				onally appropriate terms, eg.
				the St. Joe Mountains. It occupies a
slight wide	spot in the valley on a ic	ow flat next to the river at an ele	evation of 2,470 it	above mean sea level.
		Part C – Prehist	oric Sites	
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42. How cla	101 1			
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		m		
Y	ual artifacts:	1		
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45 Lithic	Debitage – Estimated (Juantity		
	None	□ 10-25 □ 25-100	□ 100-500	□ 500+
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	cortication		Tertiary	Shatter
				Shatter
40. Materia	at types			
47. Additio	onal description			
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	V			0.25

48. Features:

Count	Category	Description
19. Addition	nal description	
y		

Part D – Historic Sites

- 50. Cultural affiliation Avery Division Rail Yard
- 51. Oldest date 1909 Recent Date 1977
- 52. How determined Historic records, historic maps, artifacts
- 53. Maximum artifact density n/a m²
- 54. Individual artifacts:

Count	Category	Description
4	Domestic	Whole glass containers
3	Domestic	Glass container fragments
1	Domestic	Ceramic fragments
8	Industrial	Railroad-related artifacts
~80	Architectural	Whole bricks, concrete fragments, milled wood, mortar, brick fragments, terra cotta pipe

55. Additional description:

Scatter 1 is located in the easternmost part of the project area within the Bentcik property at the top edge of the river bank, this scatter of modern and historical debris included a corroded wire, two wooden railroad ties, one concrete fragment, milled wood, and three pieces of modern bottle glass. Items identifiable as more than 50 years were mixed together with objects of undeterminable age and items that were modern. The historical items were observed scattered in an area measuring approximately 100 ft east to west and 20 ft wide north to south. Materials included items of architectural character and more specifically were attributed to the Avery Division rail yard deconstruction.

Scatter 2 consists of one crushed metal can, two brick fragments, and pieces of concrete. The metal can was rectangular and probably contained oil or gasoline. The materials were located within the Bentcik property near the river bank and covered a small area of 20 ft by 20 ft.

Scatter 3 is situated on level terrain, just south of Highway 50 within the Bentcik property. It consists of a sparse scatter of domestic and architectural debris over an area of 150 ft by 100 ft. Artifacts noted include one piece of aqua-colored bottle glass, one undecorated fragment from a ceramic bowl, three railroad spikes and a metal railroad plate that was marked "55 LB AS E & RR/90 LB ARA A," several pieces of terra cotta sewer pipe, and two slabs of concrete.

Scatter 4 is located on the Potlatch property immediately west of Feature 2 and covers an area approximately 140 ft long and by 40 ft wide. At the ground surface it includes two pieces of aqua bottle glass, about 12 whole bricks (both red and tan), several bricks attached together with mortar, and large concrete pieces. No maker's marks were noted on the glass or brick items. The debris is mostly architectural and likely related to demolition of the roundhouse and associated buildings of the rail yard.

Scatter 5 is located at the western end of the project area, next to the bank, and includes four historical bottles and one train railcar wheel. The train wheel is 17 inches in diameter, made of metal, and is located 10 ft north of the bottles. Two of the glass containers are amber beer bottles, one is a colorless milk bottle, and the other, also colorless, is a flask. The colorless containers show no hint of amethyst coloring, which is indicative of the use of manganese dioxide as a decoloring agent in the glass, which if present would date the bottles to ca. 1880-1925 (Newman 1970). Each bottle is embossed on its base with a makers' mark. Two of them feature the oval-diamond-I trademark for the Owens- Illinois Glass Company (Toulouse 1971:403) and the other two are embossed with a connected "NW" for the Northwestern Glass Company.

Newman, T. S.

1970 A Dating Key for Post-Eighteenth Century Bottles. Historical Archaeology 4:70-75.

Toulouse, Julian

1971 Bottle Makers and Their Marks. Thomas Nelson, Inc. New York.

56. Features:

Count	Category	Description
1	Industrial/Architectural	Feature 1- Bay Stall, southeastern section of the roundhouse
1	Industrial/Architectural	Feature 2- Boiler house foundation
1	Industrial/Architectural	Feature 3- Lead railroad tracks to a storage bay, storage bay/roundhouse foundation
1	Industrial/Architectural	Feature 4- Concrete foundation of the northwestern portion of the railroad turntable
1	Industrial/Architectural	Feature 5- Lead railroad tracks between storage bay and turntable

57. Additional description

Feature 1 is likely a concrete floor or foundation identified in the south-central part of the project area near the river bank and a short distance west of the section 15/16 boundary. According to the 1915 map, it is in the vicinity of the southeastern part of the roundhouse and very near where the map shows a storage bay within the roundhouse to have been located. It was likely part of one of the 12 bay stalls where locomotives were stored or maintained. The feature is composed of two disconnected pieces of concrete. The larger of the two is rectangular in outline and minimally 1 foot tall. It frames an interior space filled with gravel and covered with grass. As observed it is 24 ft long and 8.5 ft across from outside edge to outside edge. The other part of the feature is a concrete footer or part of a foundation. It is 2 ft west of the first part. As observed it is 24 ft long and 3.25 ft wide. Both parts of Feature 1 extend northward and are covered by a large pile of rock. It is likely that Feature 5, described below, represents a continuation of Feature 1 on the north side of the rock pile. No artifacts were associated with Feature 1.

Feature 2 is a concrete slab was observed at the eastern end of the Potlatch property just west of the section 15/16 line in an area that would have been in the center of the rail yard. It is 50 ft long east to west and 32 ft wide north to south. Its location and dimensions closely match those of the "Boiler House" depicted on the 1915 map. One complete brick was found next to the foundation/pad. The brick is machine made and tan in color. It is marked "309/SECURITY." The mark identifies the brick as having been manufactured by the American Arch. Co. between 1910 and 1911 (Gurke 1987:294).

Feature 3 consists of metal railroad tracks laid in concrete observed a short distance to the west of Feature 1 in the southern part of the project area. The location of the tracks corresponds well to where a storage bay and lead tracks are shown on the 1915 map. On the map the tracks are denoted to have been 129 ft, 1 inch long and connected the storage bay to the turntable. The observed section was approximately 15 ft long and 13 ft wide and would have been situated on the east side of the roundhouse. The inside of the roundhouse where trains were kept in storage bays included tracks and a concrete floor very similar to the arrangement of Feature 3. Specifically, the feature consists of one 2-inch thick metal rail next to an approximate 12-foot wide concrete slab.

Feature 4 is located just south of Highway 50 in an area that would have been toward the center of the Avery Division rail yard. The feature is part of a circular concrete footer or foundation that represents an interior element of the railroad turntable that was used to move and position locomotives (and rail cars) between the main rail tracks to lead tracks that led into the roundhouse storage bays. Feature 3, described above, is an example of a lead track. The turntable was a large, round, concrete feature that was 107 ft in diameter and consisted of two tiers. Feature 4 is part of the interior, lower tier.

Its function is unknown but it may have served as the surface upon which the turntable rotated. Feature 4 is approximately 20 ft long and 16 inches wide. Attempts to follow the arcing footer/foundation were unsuccessful and it may be buried beneath the ground surface. Following the arc of the exposed part led to several large pieces of concrete rubble that likely represent a demolished section of the turntable.

Feature 5 consists of a section of lead tracks that would have been between the turntable and the roundhouse or partly within the roundhouse. The tracks are marked by two parallel indentations on the ground surface, where rail track has been removed, surrounded by concrete. Another set of lead tracks, Feature 3, oriented parallel to Feature 5, are located just to the west. Feature 5 is 40 ft long and 5 ft wide. It extends southeastward to a large rock pile. Feature 1 is in line with it and the two features appear to represent most of the length of a single set of lead tracks.

Gurcke, Karl

1987 Bricks and Brickmaking: A Handbook for Historical Archaeology. University of Idaho Press, Moscow, Idaho.

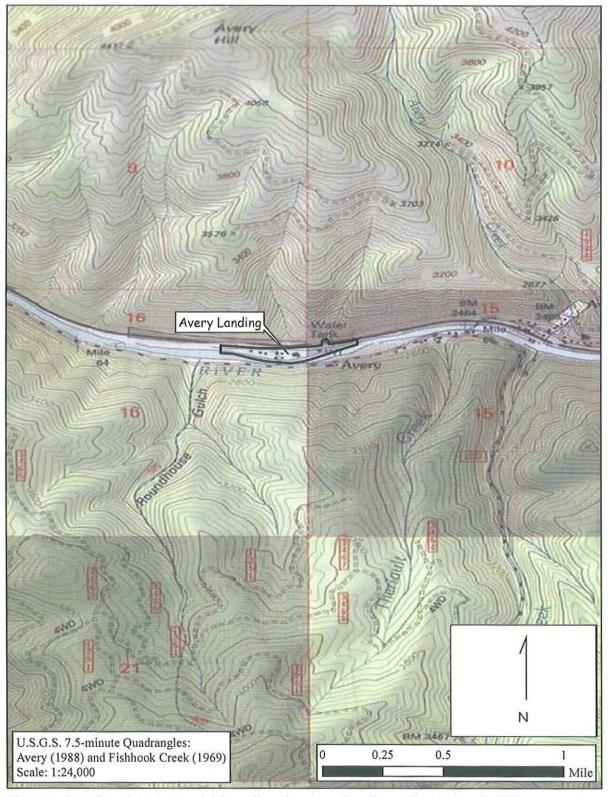


Figure 1. Location of the Avery Division rail yard at Avery Landing as depicted on the USGS 1988 Avery and 1969 Fishhook Creek, Idaho, 7.5-minute topographic quadrangles.

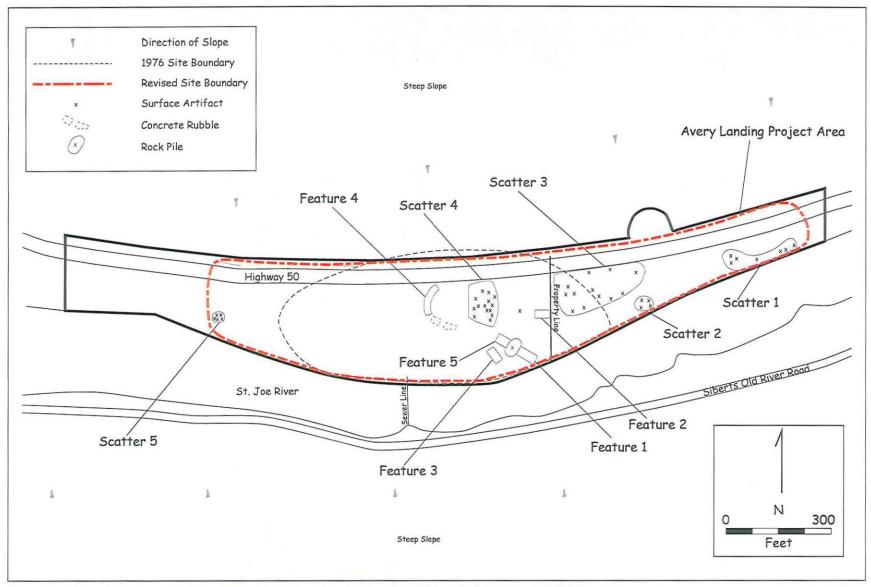


Figure 2. View of the Avery Landing Project area showing the location of historical features and debris scatters.

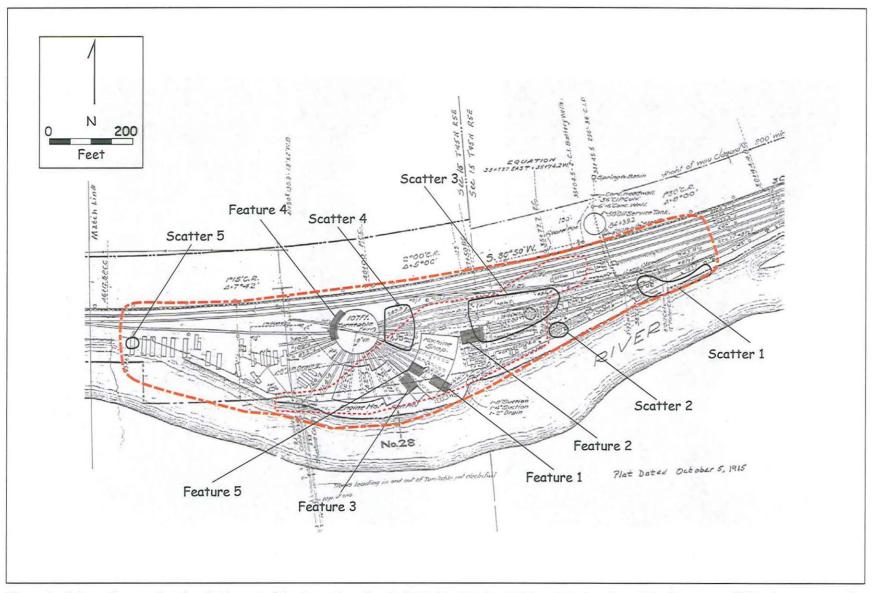


Figure 3. Schematic map showing the layout of the Avery Landing Rail Yard in October 1915 and the location of the features and historic scatters, and the revised site boundary (orange dashed line).



Figure 4. Overview of the Bentcik property within the project area. View is to the southeast.



Figure 5. Overview of the Potlatch property within the project area. Photo is looking west from atop a large rock pile located on Potlach property with the staging area in the background.